

Records of rare Fishes of the Family Chaetodontidae from Bombay

BY

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(With five text-figures)

In his paper 'Further records of lobsters from Bombay' (Chhapgar & Deshmukh 1964), the senior author had remarked on the presence of some species of fishes at Bombay in 1961-62 which do not normally occur there. In the year 1966 this phenomenon was again repeated, this time with fishes of the subfamily Chaetodontinae. The only fish belonging to this subfamily regularly occurring at Bombay is *Chaetodon* (*Chaetodontops*) *collare* Bloch. However, on 8 March, 1966, along with other marine fishes collected on the foreshore at Cuffe Parade (southern Bombay) and brought alive for display at the Taraporevala Aquarium, was a juvenile specimen of the butterfly fish, *Chaetodon* (*Chaetodontops*) *lumula* (Lacépède). More specimens of this species were caught within the next three months. Finally, on 26 May, 1966, along with one specimen of this fish, we received one live specimen each of *Anisochaetodon* (*Linophora*) *auriga* (Forskål), *Anisochaetodon* (*Oxychaetodon*) *lineolatus* (Cuvier & Valenciennes), and *Chaetodon* (*Rhabdophorus*) *xanthocephalus* Bennett. All four fishes are new records for Bombay; Munro (1955) has recorded only two of them, viz., *A. auriga* and *C. xanthocephalus* from Ceylon. A key to their identification and brief descriptions are given below.

KEY TO THE IDENTIFICATION OF BUTTERFLY FISHES OF BOMBAY

1. Scales uniform, with regularly rounded posterior border (*Chaetodon*).....2
Two kinds of ciliated scales; large rhombic ones, their posterior border with unequal sides forming an obtuse angle, at least on anterior part of trunk, and much smaller, regularly rounded ones elsewhere (*Anisochaetodon*).....4
2. Spinous dorsal fin nearly twice longer than soft dorsal.....
.....*Chaetodon* (*Rhabdophorus*) *xanthocephalus*
Spinous dorsal fin somewhat longer than soft dorsal (*Chaetodontops*).....3

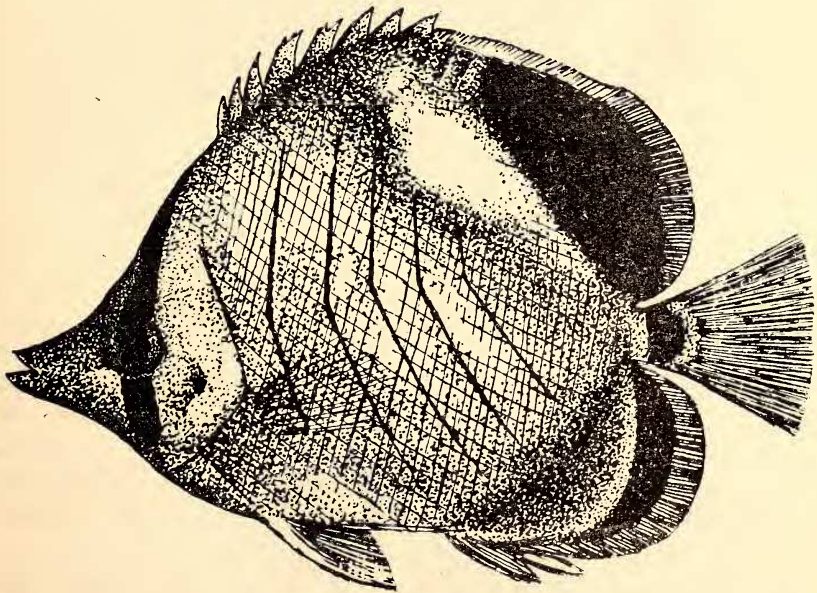
3. Lower border of eye below a horizontal line passing through the beginning of the gape of the mouth ; lateral line arched.
.....*Chaetodon (Chaetodontops) lunula*
Lower border of eye touching or slightly above a horizontal line passing through the beginning of the gape of the mouth ; lateral line angular.
.....*Chaetodon (Chaetodontops) collare*
4. Snout straight, slightly longer than eye. . . . *Anisochaetodon (Linophora) auriga*
Snout conical, twice longer than eye. . . . *Anisochaetodon (Oxychaetodon) lineolatus*

***Chaetodon (Rhabdophorus) xanthocephalus* Bennett**

Chaetodon xanthocephalus, Day, 1887-88, p. 104, 1889, pl. 26 ; Smith, 1953, p. 239, pl. 32.

Rhabdocephalus xanthocephalus, Munro, 1955, p. 174, pl. 34.

The body is silvery-grey. The area covered by a line cutting across from the middle of the dorsal fin to the upper part of the caudal peduncle is jet black. In front of this is a wide oblique white band. The soft portion of the anal fin is smoky grey. The borders of the dorsal and anal fins, as well as the cheeks, and breast are orange. The caudal peduncle is black, but has orange stripes both before and behind it. A black vertical stripe passes through the eye. Five narrow black parallel lines run across the body. In their upper half they are straight and vertical ; in their middle they suddenly turn and run obliquely backward so as to form an obtuse angle. The tail fin is colourless and transparent.



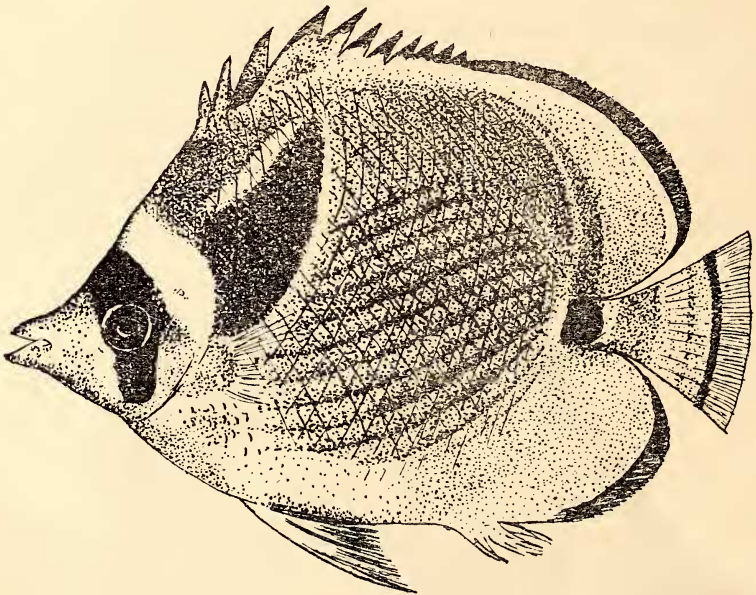
One juvenile specimen, 65 mm. in total length, was caught at Cuffe Parade on 26 May, 1966.

Chaetodon (Chaetodontops) lunula (Lacépède)

Chaetodon lunula, Day, 1887-88, p. 108 ; Smith, 1953, p. 238, pl. 31.

Chaetodon (Chaetodontops) lunula, Weber & De Beaufort, 1936, p. 83.

The body is lemon yellow. A black vertical band passes through the eye ; starting above it, on the forehead, and continuing behind it is a backwardly curving white collar. Arising from the middle of the collar and extending backward is a black triangular patch, curving upward but falling far short of the dorsal fin. A dark brown band curves along the top of the body from shoulder to caudal peduncle, widening at both extremities. On the trunk is a series of thin, straight, brown lines running obliquely upward from front to back. The borders of the soft dorsal and anal fins are lined with black, and there is a thin black line separating the yellow caudal peduncle from the transparent, colourless tail fin.



In very young specimens there are two round, white-bordered, black ocelli, the lower one in front of the caudal peduncle and the other being slightly above it. As the fish grows, however, the upper ocellus disappears, while between it and the lower ocellus arises a dark grey, curved line, very thin at the top but widening below. The tips of the spines of the dorsal fin are black.

Five specimens, ranging from 46 to 110 mm. in total length, were caught at Cuffe Parade between 8 March and 26 May, 1966.

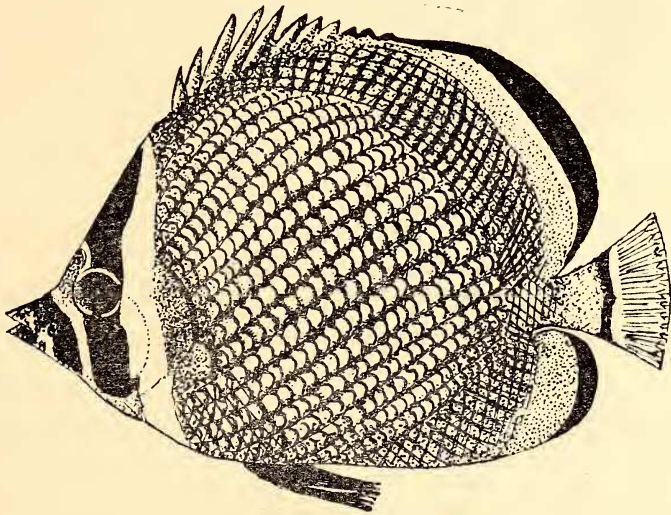
Chaetodon (Chaetodontops) collare Bloch

Chaetodontops collaris, Munro, 1955, p. 174, pl. 34.

Chaetodon collaris, Day, 1887-88, p. 107, 1889, pl. 27.

Chaetodon (Chaetodontops) collare, Weber & De Beaufort, 1936, p. 91.

Body olive brown, tending to red on the dorsal and anal fins. A dark chocolate brown vertical band passes through the eye; in front of and behind it are vertical white stripes, the latter being broader. The centres of the scales on the body are paler, giving the appearance of parallel stripes on the body obliquely ascending from front to back. The soft dorsal and anal fins are bordered black. The caudal peduncle is carmine red, and is separated from the transparent colourless tail fin by a thin black stripe.



This is the common species of butterfly fish in Bombay, being caught at all sizes from 35 to 120 mm. in total length.

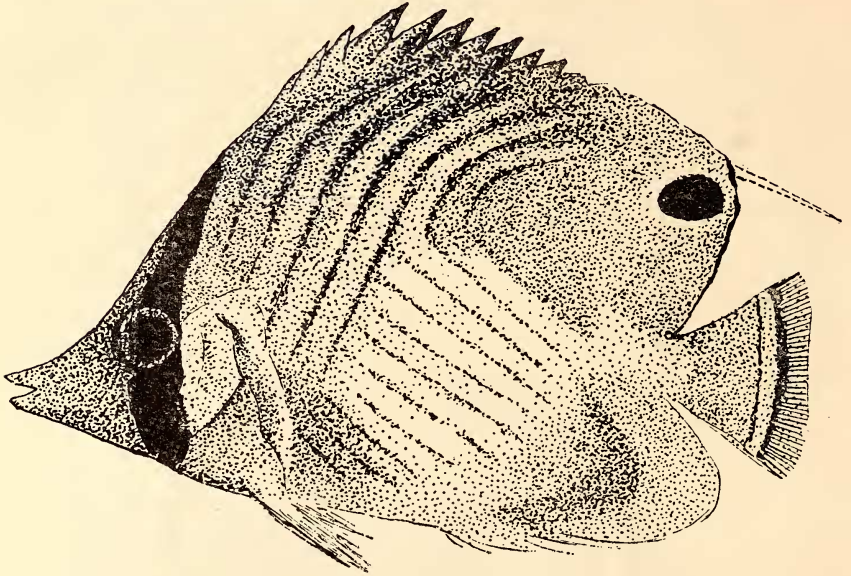
Anisochaetodon (Linophora) auriga (Forskål)

Chaetodon auriga, Day, 1887-88, p. 106, 1889, pl. 27; Smith, 1953, p. 237, pl. 31.

Linophora auriga, Weber & De Beaufort, 1936, p. 103; Munro, 1955, p. 175, pl. 34.

The body is white in the middle, but light golden yellow at all edges and especially in the regions of the soft dorsal and anal fins and on the cheeks. The usual black vertical band passing through the eye is present. Across the upper half of the body are five complete and two incomplete dark stripes passing obliquely upward from front to back, while on the lower half of the body are eleven stripes passing obliquely downward

from front to back, and meeting the previously mentioned stripes at right angles. The soft dorsal fin is edged with black. There is an oval black ocellus in the middle of the soft dorsal fin.



One juvenile specimen, 73 mm. in total length, was caught at Cuffe Parade on 26 May, 1966. The setiferous extension of the dorsal fin found in this species is absent in the present specimen.

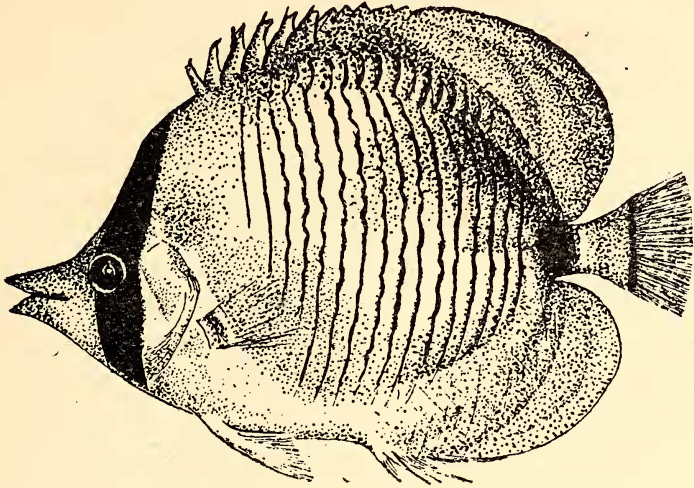
Anisochaetodon (Oxychaetodon) lineolatus (Cuvier & Valenciennes)

Chaetodon lineolatus, Smith, 1953, p. 238, fig. 601.

Anisochaetodon (Oxychaetodon) lineolatus, Weber & De Beaufort, 1936, p. 114, fig. 29.

The colour of the body is silvery grey, while the cheeks, the soft dorsal and anal fins (except at the extreme edge) and caudal peduncle are yellow. A black vertical band passes through the eye. A series of 16 wavy black vertical lines cross the body from just behind the pectoral fin up to a dark black patch immediately in front of the caudal peduncle. These lines extend right up to the base of the dorsal fin above, but stop short a little distance above that of the anal fin. The anteriormost three to four wavy bands stop somewhere around the middle of the body. A black crescent-shaped patch runs along the upper posterior border of the body from the commencement of the soft dorsal fin up to and including the caudal peduncle. The caudal peduncle is yellow, with a narrow black posterior edge. Behind this the tail fin is colourless and transparent.

One juvenile specimen, 66 mm. in total length, was caught at Cuffe Parade on 26 May, 1966. This species has been illustrated by Smith



(1953, p. 238) ; however, in his figure the vertical lines are shown straight. Day (1888) records the distribution of this fish as Ceylon and Zanzibar.

ACKNOWLEDGEMENT

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